In the Claims:

Please cancel claims 5-6, 8, 19-36, 38-39, and 48-50. Please amend claims 1, 14, 18, 37, 41, 43-44, and 46-47. Please add new claims 51-86. The claims are as follows:

1. (Currently amended) An encapsulant composition comprising:

a resin material selected from the group consisting of epoxy and cyanate ester resins;

a flexibilizing agent comprising 2 percent to about 5 percent by weight of said composition; and

a filler material comprising substantially spherical or spheroidal particles, each particle having a diameter of less than about 41 microns,

wherein the composition has a higher fracture toughness, a lower viscosity, increased thermal shock resistance at a temperature excursion below -40 °C, or combinations thereof than the composition would have if the flexibilizing agent were not present in the composition.

2-13. (Canceled)

14. (Currently amended) The composition of claim 1, wherein a portion of each of said spherical or spheroidal particles includes a layer of coupling agent positioned thereon, and wherein the coupling agent comprises about 0.25% by weight of the filler material.

15-17. (Canceled)

18. (Currently amended) An electronic package comprising:

a substrate having an upper surface;

a semiconductor chip mounted on a portion of said upper surface of said substrate and electrically coupled to said substrate, said semiconductor chip having a bottom surface and at least one edge surface being substantially perpendicular to said bottom surface; and

a material positioned on at least said portion of said upper surface of said substrate and against at least a portion of said at least one edge surface of said semiconductor chip, said material being an encapsulant composition which includes:

a resin material,

a flexibilizing agent comprising 2 percent to about 5 percent by weight of said composition, and

a filler material comprising substantially spherical or spheroidal particles, each particle having a diameter of less than about 41 microns,

wherein the composition has a higher fracture toughness, a lower viscosity, increased thermal shock resistance at a temperature excursion below -40 °C, or combinations thereof than the composition would have if the flexibilizing agent were not present in the composition.

19-36. (Canceled)

37. (Currently amended) The electronic package of claim 18, wherein a portion of each of said

spherical or spheroidal particles includes a layer of coupling agent positioned thereon, and wherein the coupling agent comprises about 0.25% by weight of the filler material.

38-40. (Canceled)

41. (Currently amended) A method of making an encapsulant composition, the method comprising the steps of:

providing a first quantity of resin material;

adding to said first quantity of resin material a second quantity of flexibilizing agent by homogenizing said flexibilizing agent in said first quantity of resin material by reacting said resin material and said flexibilizing agent together at a temperature of greater than about 100 degrees Celsius;

adding to said first quantity of resin material a third quantity of filler material comprising substantially spherical or spheroidal particles, each particle having a diameter of less than about 41 microns; and

blending said resin material, wherein after said blending said flexibilizing agent comprises 2 percent to about 5 percent by weight of said composition,

wherein immediately after the steps of adding the flexibilizing agent and adding the filler material have been performed the composition is uncured and the composition is stable for a time period at least 12 hours,

wherein the composition has a higher fracture toughness, a lower viscosity, increased thermal shock resistance at a temperature excursion below -40 °C, or combinations thereof than

the composition would have if the flexibilizing agent were not present in the composition.

42. (Canceled)

43. (Currently amended) The method ~~of making the composition~~ of claim 41, wherein said step of blending is performed under vacuum.

44. (Currently amended) The ~~composition of claim 1 wherein said flexibilizer comprises a thermoplastic material containing a thermoplastic oligomer backbone~~ method of claim 43, wherein said step of blending is performed under vacuum at a pressure of about 5 millimeters of mercury.

45. (Canceled)

46. (Currently amended) The ~~electronic package of claim 18 wherein said flexibilizer comprises a thermoplastic material containing a thermoplastic oligomer backbone~~ method of claim 41, wherein a portion of each of said spherical or spheroidal particles includes a layer of coupling agent positioned thereon, and wherein the coupling agent comprises about 0.25% by weight of the filler material.

47. (Currently amended) The method of claim 41, wherein ~~said flexibilizer comprises a thermoplastic material containing a thermoplastic oligomer backbone~~ the method further

comprises the steps of:

after the steps of adding the flexibilizing agent and adding the filler material, applying the composition to a gap between a substrate and a semiconductor chip, wherein the semiconductor chip is assembled to the substrate by Controlled Collapse Chip Connection (C4) interconnections, wherein the composition completely covers the C4 interconnections, wherein said applying the composition to the gap comprises dispensing the composition through nozzles under pressure between about 15 pounds per square inch and about 90 pounds per square inch at a temperatures between about 25 degrees °C and about 45 degrees °C to a surface of the substrate on which the semiconductor is assembled and to at least a portion of edges of a device that comprises the semiconductor chip so as to form a fillet;

after the step of applying the composition to the gap, pregelling the composition by heating the composition for a period of time between about 15 and about 60 minutes at a temperature between about 75 °C and about 100 °C; and

after the pregelling step, substantially curing the composition by heating the composition to a temperature between about 130 °C and about 180 °C for a period of time between about 2 and about 4 hours.

48-50. (Canceled)

51. (New) The composition of claim 1, wherein the composition has a higher fracture toughness than the composition would have if the flexibilizing agent were not present in the composition, wherein the flexibilizer is homogeneously blended with the resin, and wherein the flexibilizer is

adapted to chemically react with the resin material during a thermally induced chemical reaction.

52. (New) The composition of claim 1, wherein the composition has a lower viscosity than the composition would have if the flexibilizing agent were not present in the composition.

53. (New) The composition of claim 1, wherein the composition has increased thermal shock resistance at a temperature excursion below -40 °C than the composition would have if the flexibilizing agent were not present in the composition.

54. (New) The composition of claim 1, wherein the flexibilizing agent is a flexibilizer blend comprising a first flexibilizer and a thermoplastic, wherein the composition has a higher fracture toughness and lower viscosity than the composition would have if the flexibilizer blend were not present in the composition, wherein the thermoplastic is separated from the resin to form a two-phase morphology, and wherein the first flexibilizer provides groups that connect crosslink sites in a network of the composition.

55. (New) The composition of claim 1, wherein the flexibilizing agent comprises a thermoplastic endcapped with nonreactive functional groups.

56. (New) The composition of claim 1, wherein the resin material consists of epoxy resins, and wherein the flexibilizing agent comprises a thermoplastic that is soluble in a solution of the epoxy resins.

57. (New) The composition of claim 1, wherein the resin material consists of epoxy resins, and wherein the flexibilizing agent comprises a thermoplastic that is insoluble in a solution of the epoxy resins.

58. (New) The composition of claim 1, wherein the resin material consists of epoxy resins, wherein the composition further comprises a surfactant comprising that facilitates mixing the filler with the epoxy resins, wherein the surfactant comprises non-ionic type surface active agents, and wherein the surfactant comprises between about 0.5% and about 3% by weight of the composition.

59. (New) The composition of claim 1, wherein the filler material has a negative coefficient of thermal expansion.

60. (New) The composition of claim 1, wherein the composition further comprises an organic dye comprising less than about 0.2% by weight of the composition.

61. (New) The composition of claim 1, wherein the composition further comprises non-reactive organic solvents comprising less than about 0.2% by weight of the composition or the composition is completely free of non-reactive organic solvents.

62. (New) The composition of claim 1, wherein the composition is cured and has a coefficient of thermal expansion between about 25 and about 40 ppm/° C, a glass transition temperature

between about 140° and about 190° C, and a Shore D hardness greater than about 90.

63. (New) The electronic package of claim 18, wherein the composition has a higher fracture toughness than the composition would have if the flexibilizing agent were not present in the composition, wherein the flexibilizer is homogeneously blended with the resin, and wherein the flexibilizer is adapted to chemically react with the resin material during a thermally induced chemical reaction.

64. (New) The electronic package of claim 18, wherein the composition has a lower viscosity than the composition would have if the flexibilizing agent were not present in the composition.

65. (New) The electronic package of claim 18, wherein the composition has increased thermal shock resistance at a temperature excursion below -40 °C than the composition would have if the flexibilizing agent were not present in the composition.

66. (New) The electronic package of claim 18, wherein the flexibilizing agent is a flexibilizer blend comprising a first flexibilizer and a thermoplastic, wherein the composition has a higher fracture toughness and lower viscosity than the composition would have if the flexibilizer blend were not present in the composition, wherein the thermoplastic is separated from the resin to form a two-phase morphology, and wherein the first flexibilizer provides groups that connect crosslink sites in a network of the composition.

67. (New) The electronic package of claim 18, wherein the flexibilizing agent comprises a thermoplastic endcapped with nonreactive functional groups.

68. (New) The electronic package of claim 18, wherein the resin material consists of epoxy resins, and wherein the flexibilizing agent comprises a thermoplastic that is soluble in a solution of the epoxy resins.

69. (New) The electronic package of claim 18, wherein the resin material consists of epoxy resins, and wherein the flexibilizing agent comprises a thermoplastic that is insoluble in a solution of the epoxy resins.

70. (New) The electronic package of claim 18, wherein the resin material consists of epoxy resins, wherein the composition further comprises a surfactant comprising that facilitates mixing the filler with the epoxy resins, wherein the surfactant comprises non-ionic type surface active agents, and wherein the surfactant comprises between about 0.5% and about 3% by weight of the composition.

71. (New) The electronic package of claim 18, wherein the filler material has a negative coefficient of thermal expansion.

72. (New) The electronic package of claim 18, wherein the composition further comprises an organic dye comprising less than about 0.2% by weight of the composition.

73. (New) The electronic package of claim 18, wherein the composition further comprises non-reactive organic solvents comprising less than about 0.2% by weight of the composition or the composition is completely free of non-reactive organic solvents.

74. (New) The electronic package of claim 18, wherein the composition is cured and has a coefficient of thermal expansion between about 25 and about 40 ppm/° C, a glass transition temperature between about 140° and about 190° C, and a Shore D hardness greater than about 90.

75. (New) The method of claim 41, wherein the composition has a higher fracture toughness than the composition would have if the flexibilizing agent were not present in the composition, wherein the flexibilizer is homogeneously blended with the resin, and wherein the flexibilizer is adapted to chemically react with the resin material during a thermally induced chemical reaction.

76. (New) The method of claim 41, wherein the composition has a lower viscosity than the composition would have if the flexibilizing agent were not present in the composition.

77. (New) The method of claim 41, wherein the composition has increased thermal shock resistance at a temperature excursion below -40 °C than the composition would have if the flexibilizing agent were not present in the composition.

78. (New) The method of claim 41, wherein the flexibilizing agent is a flexibilizer blend

comprising a first flexibilizer and a thermoplastic, wherein the composition has a higher fracture toughness and lower viscosity than the composition would have if the flexibilizer blend were not present in the composition, wherein the thermoplastic is separated from the resin to form a two-phase morphology, and wherein the first flexibilizer provides groups that connect crosslink sites in a network of the composition.

79. (New) The method of claim 41, wherein the flexibilizing agent comprises a thermoplastic endcapped with nonreactive functional groups.

80. (New) The method of claim 41, wherein the resin material consists of epoxy resins, and wherein the flexibilizing agent comprises a thermoplastic that is soluble in a solution of the epoxy resins.

81. (New) The method of claim 41, wherein the resin material consists of epoxy resins, and wherein the flexibilizing agent comprises a thermoplastic that is insoluble in a solution of the epoxy resins.

82. (New) The method of claim 41, wherein the resin material consists of epoxy resins, wherein the composition further comprises a surfactant comprising that facilitates mixing the filler with the epoxy resins, wherein the surfactant comprises non-ionic type surface active agents, and wherein the surfactant comprises between about 0.5% and about 3% by weight of the composition.

83. (New) The method of claim 41, wherein the filler material has a negative coefficient of thermal expansion.

84. (New) The method of claim 41, wherein the composition further comprises an organic dye comprising less than about 0.2% by weight of the composition.

85. (New) The method of claim 41, wherein the composition further comprises non-reactive organic solvents comprising less than about 0.2% by weight of the composition or the composition is completely free of non-reactive organic solvents.

86. (New) The method of claim 41, wherein after the substantially curing step, the composition has a coefficient of thermal expansion between about 25 and about 40 ppm/° C, a glass transition temperature between about 140° and about 190° C, and a Shore D hardness greater than about 90.